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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,264	02/01/2002	Bryan Scott	Scott.00003	9429
7590	06/24/2004		EXAMINER	
Steven W. Thrasher 391 Sandhill Dr. Richardson, TX 75080			CHEN, ALAN S	
			ART UNIT	PAPER NUMBER
			2182	

DATE MAILED: 06/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,264

Applicant(s)

SCOTT ET AL.

Examiner

Alan S Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED FINAL ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "160" has been used to designate multiple different ports. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 158 in Fig. 1, 200 and 218 in Fig. 2. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: acronym "IDS" should be defined upon first use on page 3, line 16, immediately after the terms "intelligent docking station".

Appropriate correction is required.

Claim Objections

4. Claims 1 and 12 objected to because of the following informalities: words "capability of" repeated an extra time in the fourth line from the end of the claims. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-3 and 5-16 are rejected under 35 U.S.C. 102(a) as being anticipated by No. US 20030120849A1 to Roslak et al. (hereafter Roslak).

7. As per claims 1 and 12, Roslak discloses a method of transferring a data element to/from a handheld computer and a device, the method comprising: converting a handheld-enabled data element into a bus-enabled data element (PDA, Fig. 9, element 10 has video signal data sent out to the docking station, Fig. 9, element 71 through USB driver, Fig. 9, element 13 and paragraph 24); receiving from a device (Fig. 9, element 71, specifically the WLAN radio), a device-based data element (data from the wireless receiver) at a docking station having a co-processor (Fig. 9, element 70 is co-processor as specifically cited in paragraph 25); the device coupled to the docking station (Fig. 9, element 72 is the WLAN device), the device capable of generating a device based data element and capable of sending the device based data element to a low level device driver resident in a docking station (data from the radio is sent to the USB host controller for transfer to PDA, disclosed in paragraph 27), the low level device driver also capable of communicating with the co-processor (Fig. 9 element 76); and the co-processor being operated by a second operating system (the ROM in the microcontroller inherently contains the OS, the microcontroller requires an operating system that is separate from PDA due to complexities of DSP, particularly having to handle WLAN and barcode scanner), the second operating system

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having a top-level driver capable of turning a device based data element into a bus-enabled data element as a driver conversion managed by a communication driver (DSP can communicate with USB driver as shown by Fig. 9, element 76); and placing the bus-enabled data element on a handheld compatible bus (data sent through bus indicated between Fig. 9, element 12 and Fig. 9, element 16').

8. As per claim 2, Roslak discloses a method of claim 1 further comprising receiving the bus-enabled data element (Fig. 9, data coming from the WLAN radio is transferred to the USB bus, thereby enabled for transfer to the handheld data element), and converting the bus-enabled data element into a handheld data element.

9. As per claim 3, Roslak discloses a method of claim 1 further comprising detecting a docking condition, and activating a communication driver in response to the docking condition (USB is inherently designed for plug and play capability).

10. As per claim 5, Roslak discloses a method of claim 1, wherein the device is a network interface card (Fig. 9, element 72 interfaces a wireless network).

11. As per claim 6, Roslak discloses the method of claim 1, wherein the act of receiving receives the device data element at a low-level device driver (paragraph 24, WLAN radio inherently requires operational driver to process, acknowledge, etc the data that it receives).

12. As per claim 7, Roslak discloses the method of claim 6, further comprising transferring the data element from the low-level device driver to a top-level device driver (transfer of data from WLAN radio to PDA, PDA having a driver, in this case, the USB driver).

13. As per claim 8, Roslak discloses the method of claim 1, wherein placing comprising using a communication driver (USB driver is the communication driver, places data on the USB bus) to control the placement of the data element on the bus.

14. As per claim 9, Roslak discloses the method of claim 1, further comprising the act of receiving the bus-enabled element at a handheld device (USB controller, Fig. 9, element 13 receives bus-enabled element).

15. As per claim 10, Roslak discloses the method of claim 9, further comprising transferring the bus-enabled data element to a communication driver capable of converting the bus-enabled data element into a handheld-enabled data element (USB driver converts data elements to something PDA can understand).

16. As per claim 11, Roslak disclose the method of claim 10, further comprising sending the handheld enabled data element to an operating system within the handheld (handheld OS inherently controls I/O of handheld).

17. As per claim 13, Roslak discloses the method of claim 12, further comprising placing the device-enabled data element on an output (USB host controller, Fig. 9, element 13) outputs data to handheld.

18. As per claim 14, Roslak discloses the method of claim 12, where the device is a monitor (paragraph 23).

19. As per claim 15, Roslak discloses the method of claim 12, further comprising employing a top-level device driver to send the device enabled data element to the device (PDA has device drivers for USB, Fig. 9, element 13).

20. As per claim 16, Roslak discloses the method of claim 12, wherein the act of converting uses a communication driver located in the handheld computer (USB controller, Fig. 9, element 13 is a communication driver).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claim 4 is rejected under 35 USC 103(a) as being unpatentable over Roslak in view of No. US005489773A to Kumar.

Roslak discloses claim 1.

Roslak does not disclose expressly the device of claim 1 being a keyboard.

Kumar discloses a handheld device with a barcode scanner that includes a keypad (Fig. 1).

Roslak and Kumar are analogous art because they are from the same field of endeavor in providing barcode scanner solutions via a portable handheld unit.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to include a keyboard device for input to be connected to a handheld device.

The suggestion/motivation for doing so would have been to manually enter customer information, as suggested by Kumar (abstract).

Therefore, it would have been obvious to combine Roslak with Kumar for the benefit of being able to enter customer information manually.

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23. Claims 17-20 are rejected under 35 USC 103(a) as being unpatentable over Roslak in view of Chen.

24. As per claims 17-19, Roslak discloses a PDA capable of being docked to an intelligent docking station (Fig. 9) with a wireless receiver (Fig. 9, element 72) that accesses a network and uses drivers to convert and transfer data from the docking station to the PDA. Roslak also discloses using a coprocessor for processing data from WLAN (Fig. 9, element 70).

Roslak does not disclose expressly the technical details into communication between the network and PDA on a data structure level, e.g., packetizing data that is transmitted and received from the wireless network.

Chen discloses the data structure of the wireless data being in the form of a packet (Fig. 2), comprising a packet ID (Fig. 2, parent logic ID) and a packet type.

Roslak and Chen are analogous art because they are from the same field of endeavor in reception and processing of wireless data where the device is a handheld device.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the packet data structure described by Chen for the PDA device and docking station and therefore requiring conversion to a compatible format for the PDA.

The suggestion/motivation for doing so would have been to be compatible with the optimal wireless configuration described by Chen, particularly dealing with self-organizing networks (column 2, lines 51-63). Furthermore, the majority of network communications use packet-based communications, e.g., TCP/IP protocol.

Therefore, it would have been obvious to combine Roslak with Chen for the benefit of optimal wireless configuration.

25. As per claim 18, Roslak further discloses using USB, which inherently uses plug and play that enables automatic detection of a device connect.

Conclusion

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan S Chen whose telephone number is 703-605-0708. The examiner can normally be reached on M-F 8:30am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's primary examiner, Paul Myers can be reached on 703-305-9656. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ASC
06/22/2004

PAUL R. MYERS
PRIMARY EXAMINER